r

5

10

15

20

25

30

35

What is claimed is:

1. A method for producing an ethylene-vinyl acetate copolymer, which method comprises copolymerizing ethylene and vinyl acetate in an alcohol-based solvent and recovering unreacted vinyl acetate from a solution after copolymerizing,

wherein the solution is introduced into a recovery column through an upper portion thereof, a vapor of an alcohol-based solvent is introduced into the recovery column through a lower portion thereof, a solution including an ethylene-vinyl acetate copolymer is taken out of the recovery column through a lower portion thereof, and unreacted vinyl acetate in the solution is taken out of the recovery column with the vapor of the alcoholbased solvent through an upper portion thereof,

wherein an oxygen concentration in the alcohol-based solvent to be introduced into the recovery column is not more than 60 ppm.

- 2. The method according to claim 1, wherein the oxygen concentration is not more than 30 ppm.
- 3. The method according to claim 1, wherein an oxygen concentration in the alcohol-based solvent for copolymerizing is not more than 15 ppm.
- 4. A method for producing a saponified ethylene-vinyl acetate copolymer, which method comprises copolymerizing ethylene and vinyl acetate in an alcohol-based solvent thereby to obtain an ethylene-vinyl acetate copolymer, recovering unreacted vinyl acetate from a solution after copolymerizing, and saponifying the ethylene-vinyl acetate copolymer,

wherein the solution is introduced into a recovery column through an upper portion thereof, a vapor of an alcohol-based solvent is introduced into the recovery column through a lower portion thereof, a solution including an ethylene-vinyl acetate copolymer is taken out of the recovery column through a lower portion thereof, and unreacted vinyl acetate in the solution is taken out of the recovery column with the vapor of the alcoholbased solvent through an upper portion thereof,

wherein an oxygen concentration in the alcohol-based solvent to be introduced into the recovery column is not more than 60 ppm.

5

- 5. The method according to claim 4, wherein a saponification degree of the saponified ethylene-vinyl acetate copolymer is at least 90 mol %.
- 6. The method according to claim 4, wherein the oxygen concentration is not more than 30 ppm.
- 7. The method according to claim 4, wherein an oxygen concentration in the alcohol-based solvent for copolymerizing is not more than 15 ppm.